

Two New *Typhlodromus* from Florida. (Acarina: Phytoseiidae)

By DONALD DE LEON, Pensacola, North Carolina

The two species described below are of particular interest because the females are practically the same in appearance, but the males can be readily separated by their distinctive spermatophoral processes and by the different number of preanal setae. They belong to the species group with four pairs of anterior lateral setae and fit most closely the characterization of *T. cucumeris* Oud. as given by Chant (1958); they differ chiefly from the characterization of that species in that in the females the pair of pores on the ventrianal shield is in line with the posterior pair of preanals instead of being posterior of them, and in the males the ventrianal shield bears a pair of pores instead of lacking them.

All measurements are in microns. I have followed Evans (1957) in the use of metatarsus in place of basitarsus and, as in previous papers, the system suggested by Garman (1948) for distinguishing the setae of the dorsal shield.

Typhlodromus dentilis, n. sp.

FEMALE: Dorsal shield imbricate, 295–329 long, 180–199 wide (five specimens) with nine lateral, two median and six dorsal pairs of setae. The lengths of these setae follow: L1 29, L2 19, L3 21, L4 29–34, L5 27, L6 27, L7 16, L8 13, L9 75 (pectinate); M1 13, M2 44 (pectinate); D1 24, D2 11, D3 13, D4 14–20, D5 20, D6 8. L1 and L4 are about as long as or somewhat longer than the distance between the bases of L1–L2 and L3–L4, respectively, L2 and L3 distinctly shorter than the distance to the seta next behind; the six setae of the dorsal hexagonal area shorter than the distance between their bases. S1 and S2 present. Peritremata extending forward to D1. Sternal shield with three pairs of setae; two pairs of metapodal shields, the primary one oval, 21 long and about 5.5 wide, the accessory linear, 10 long and about 2.5 wide. Ventrianal shield with three pairs of preanal setae and a pair of half-round pores be-

tween the posterior pair of preanals and in line with them or very slightly anterior of a line between them; ventrianal shield 109 long, 92 wide, practically pentagonal in shape, but widest by a small amount at about the middle pair of preanals and slightly constricted caudad beginning at a point about in line with the posterior pair of preanals; four pairs of interscutal setae including VL1 which is 47 long bordering ventrianal shield. Movable digit with three teeth; fixed digit with *pilus dentilis* and 10 teeth including the subapical tooth. Legs rather short and heavy; genua I-IV each with a macroseta 18, 15, 22, and 37 long, respectively; tibia IV and metatarsus each with a macroseta 18 and 61 long, respectively; all macrosetae slightly enlarged at tips.

MALE: Resembles female; dorsal shield 231-248 long, 144-163 wide (three specimens). Ventrianal shield with three pairs of preanals and a pair of pores. Spermatophore bearer roughly L-shaped with a large triangular process extending from "heel"; length of foot, including process, 23, length of shank 15. Fixed digit with *pilus dentilis* and with six teeth extending basad from subapical tooth, the first tooth about half the height of the others; subapical tooth greatly enlarged, the terminal hook (or tooth) appearing merely as a small spur.

Holotype: Male, Miami, FLORIDA, May 24, 1956 (D. De Leon), from *Rhus copallina*. *Paratypes*: four females, same data as for holotype; two males, two females, S. Miami, Fla., November 24, 1954 from *Centradenia* sp.; one male, one female, Ft. Lauderdale, Fla., October 23, 1954, from *Jussiaea peruviana*; one male, Key Largo, Fla., September 27, 1958, from *Callicarpa americana*.

Typhlodromus dillus, n. sp.

The male of *T. dillus* can be most readily distinguished from the male of *T. dentilis* by the foot of the spermatophore bearer being about as long as the shank, the heel lacking the triangular shaped process, and by the ventrianal shield having four pairs of preanal setae. The ventrianal shield of the female has the

sides practically straight or slightly bowed out whereas in *dentilis* the sides bend in slightly.

FEMALE: Dorsal shield imbricate, 294–315 long, 168–188 wide (five specimens) with nine lateral, two median, and six dorsal pairs of setae. The lengths of these setae follow: L1 18–26, L2 14–18, L3 12–19, L4 18–31, L5 14–24, L6 17–24, L7 14–21, L8 14–18, L9 63–73 (pectinate); M1 9–15, M2 33–47 (pectinate); D1 18–26, D2 14–18, D3 10–14, D4 11–17, D5 10–20, D6 10. S1 and S2 present. L1 and L4 are somewhat shorter to about as long as the distance between the bases of L1–L2 and L3–L4, respectively; L2 and L3 are distinctly shorter than the distance to the base of the seta next behind; the six setae of the dorsal hexagonal area are shorter than the distance between their bases. Peritremata extending forward about to D1. Sternal shield with three pairs of setae; two pairs of metapodal shields, the primary one unevenly oval, 17 long, about 5.5 wide, the accessory linear, 9 long, about 2.5 wide. Ventrianal shield 108 long, 92 wide with three pairs of preanal setae and a pair of half-round pores between and in line with the posterior pair of preanals; ventrianal shield bordered by four pairs of interscutal setae including VL1 which is 40–45 long. Movable digit with three teeth; fixed digit with *pilus dentilis* and nine teeth including the subapical tooth. Legs rather short and heavy; genua I–IV each with a macroseta 16, 14, 19, and 24–36 long, respectively; tibia IV and metatarsus each with a macroseta 10–16 and 40–51 long, respectively; all macrosetae slightly enlarged at tips.

MALE: Resembles female; dorsal shield 252 long, 147 wide. Ventrianal shield with four pairs of preanal setae and a pair of pores. Spermatophore bearer roughly L-shaped, the foot about 10 long with a small more or less laterally directed process near the middle, the shank about 13 long and rather thick. Movable digit with one tooth, fixed digit with six teeth basad of subapical tooth which is about the size of the terminal hook.

Holotype: Male, Barwell, FLORIDA, September 1, 1956 (D. De Leon), from *Hicoria* sp. *Paratypes*: three males, four females, other data as for holotype; one female, Fellowship, Fla., September 1, 1956, from *Zanthoxylum clava-herculis*; one male

and one female, Branford, Fla., September 1, 1956 from *Quercus* sp. Additional specimens were collected at Columbus, Ga., August, 1956, from alder and from red maple.

Types of the above two species are in the author's collection; paratypes will be deposited in the University of Florida Collections, Gainesville.

LITERATURE CITED

- CHANT, D. A. 1958. Immature and adult stages of some British Phytoseiidae Berl., 1916 (Acarina). Jl. Linn. Soc. Lond. Zoology, 43 (294): 599-643.
- EVANS, G. O. 1957. An introduction to the British Mesostigmata (Acarina) with keys to families and genera. Jl. Linn. Soc. Lond., Zoology, 43 (291): 203-259.
- GARMAN, P. 1948. Mite species from apple trees in Connecticut. Conn. Agr. Exp. Sta. Bul. 520.

Eucerceris simulatrix Viereck & Cockerell Misspelled on Type Label

By H. A. SCULLEN

On a recent visit to the Academy of Natural Sciences of Philadelphia (Sept. 29, 1958) the writer discovered Type No. 10396 was labeled *Eucerceris simulator* Viereck & Cockerell. This was one of a series of type labels placed on specimens by E. T. Cresson, Jr. As no *E. simulator* was ever described a careful check was made with the original description of *E. simulatrix* Viereck & Cockerell (Jour. N. Y. Ent. Soc., XII: 87, 1904). The above specimen was found to agree with the original description of *E. simulatrix*. I, therefore, consider the above specimen to be the Holotype of *Eucerceris simulatrix* Viereck & Cockerell and have so corrected the label. The species was described from a single specimen.

As indicated in my 1939 review of the genus *Eucerceris* (Oreg. State Monog., Studies in Ent., No. 1, p. 28) *E. simulatrix* V. & C. is a synonym of *E. fulvipes* Cresson.